

XXI. DESCRIPTIONS OF TWO NEW SPECIES
OF DIPTERA FROM SEISTAN,
EASTERN PERSIA.

By E. BRUNETTI.

In a small collection of Diptera made in Seistan by Dr. N. Annandale and Mr. S. W. Kemp in November and December, 1918, there are two undescribed species of which the material justifies the publication of diagnoses. These two species are here described at the request of Dr. Annandale, in order that he may refer to them in a forthcoming report on the aquatic fauna of Seistan.

Family SYRPHIDAE.

(?) *Didea annandalei*, sp. nov.

Seistan, E. Persia.

Long. 8 mm.

Almost intermediate between *Didea* and *Syrphus*.

Head. Frons and face bright chrome yellow; former with short stiff black pubescence, latter with softer pale yellow hairs; antennae orange, upper side brownish; arista orange; mouth border brownish. Eyes quite bare; occiput black, entire margin with fringe of whitish hairs; vertex with stiff black hairs; ocelli ruby red.

Thorax shining black; dorsum without trace of median grey stripes on anterior margin, wholly with quite whitish pubescence; side margins distinctly yellowish; pleurae mainly shining black, with whitish pubescence; mesopleura aeneous with yellowish pubescence. Scutellum wholly rather dull yellow with all yellowish pubescence.

Abdomen with yellow spots as in *D. fasciata*, Macq., except that the fifth segment is wholly orange yellow except at middle of base. Belly yellowish; an indistinct black mark about middle of each segment.

Legs, except the black coxae, wholly yellow.

Wings with 3rd longitudinal vein barely dipped.

Described from a single ♂ from Nasratabad, Consulate Garden, Seistan. The specimen is in the collection of the Indian Museum.

The present specimen possesses two out of the three characters which may be regarded as typical of *Didea*, namely the general *facies* due to the shape and size of the abdominal spots, and the ridged edge to the abdomen, but it lacks the third and equally important character of the considerably dipped third vein,

as in *annandalei* it is barely as much dipped as in *Syrphus annulipes*, Zett. of Europe. This latter species has hairy eyes.

Didea is supposed to have almost but not quite bare eyes, and wholly black antennae, both characters appearing to me weak as generic ones. The present species differs from *fasciata* by the nearly wholly orange fifth abdominal segment, the entirely yellow legs (excepting the coxæ), the absence of greyish stripes on the thoracic dorsum and by its yellowish side margins, the whitish pubescence on the thorax and pale yellowish on the scutellum.

Family EPHYDRIDAE.

Halmopota viridescens, sp. nov.

Seistan, E. Persia.

Long. about $3\frac{1}{4}$ mm.

Head broad, transverse, a little broader than thorax. Frons and face extremely broad, occupying, seen from the front, fully three fifths of the head; frons very flattened, face strongly projecting, seen from above almost semicircular; cheeks broad, forming a conspicuous hind angle to lower part of head in profile; the whole head sharply cut off horizontally at the mouth border. Proboscis with large labella, appearing like a large lower lip, the whole mouth exceedingly frog-like. Eyes comparatively small, bare. Frons greenish-grey, shining; ocellar triangle barely elevated, yellowish, with a weak upper pair of erect bristles and a much stronger lower, proclinate pair. Vertical bristles long and strong, inner pair convergent, outer pair divergent; post vertical bristles absent. Three pairs of strong fronto-orbital bristles, placed near eye-margins, with a weaker bristle above the 1st and between 1st and 2nd (making five in all) nearly equidistant. A linear depression on frons and face near eye-margins, making the eyes appear a trifle bulging. Antennae short, ash grey; 1st joint very short, 2nd thick, bluntly triangular, 3rd as long as 2nd, bluntly conical; arista bare, moderately long, black, distinctly plumose on upper side only. Face ash grey, with a row of distinct bristles from side to side, a little below eyes and antennae, following the curvature of these organs; a second row of similar bristles, though longer ones, on mouth border, dwindling in point of size towards sides. Entire face with minute black stiff hairs; a slight greenish-grey tinge to extreme upper part of face immediately below antennae. Proboscis and labella brownish-grey; occiput grey with short pale pubescence.

Thorax subquadrate, a trifle longer than broad, moderately arched, greenish-grey, a little shining, with whitish dust. Five pairs of dorso-central bristles, long and strong; two humeral (perhaps three) of unequal size; two notopleural; apparently three supra-alar. A perpendicular row of stiff hairs, directed backwards, on hind margin of mesopleura. Scutellum with one bristle towards middle of side margin and one long apical one.

Abdomen greenish-grey with short stiff black pubescence.

Legs. Coxae and femora black, grey dusted; tips of latter narrowly, and remainder of legs brownish-orange; stiff black hairs on tarsi. Pubescence of legs black, meagre.

Wings greyish, a little yellowish at base; halteres dull orange.

Described from 3 specimens, apparently $\sigma \sigma$ (two in indifferent condition), taken on the surface of a watercourse, Chilling, Seistan, 20-xii-18 (*Annandale* and *Kemp*). These specimens are in the collection of the Indian Museum.

The present species does not quite fulfil the generic characters of *Halmopota*, owing to the presence of the row of very conspicuous bristles directed downwards from the lower edge of the mouth border, and which Becker distinctly states should not be present. There is also no prominent bristle on each side of the face near the lower angle of the eye. Apart from these points *viridescens* agrees remarkably closely with Becker's figure of the head in profile.¹

Specifically the present species differs from the European *salinarum*, Bouché, by the greenish (not velvet black) frons and abdomen and also by the blackish (not reddish) femora.

From the only other known species, *mediterranea*, Lw., it principally differs (in addition to the above two characters) by the third and fourth veins not being convergent towards the tip. It is rather smaller than both the known species.

¹ *Berl. Ent. Zeits.* XLI, pl. v, 4 (1896).